Fig. 1

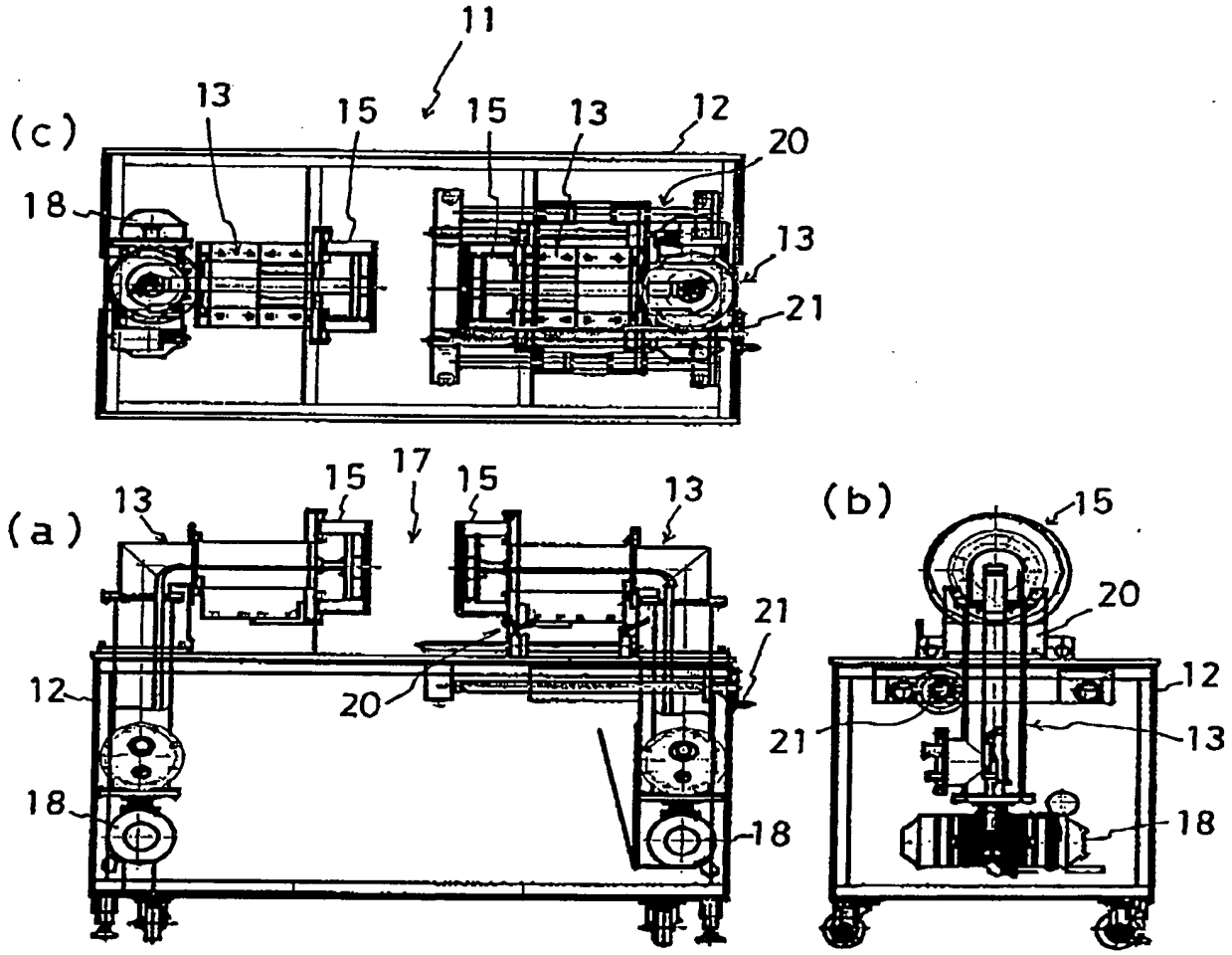

11
(c)
13
15
15
13
12
20
18
13
21
(a)
13
15
17
15
13
21
12
20
18
18
(b)
15
20
12
21
13
18

Fig. 2

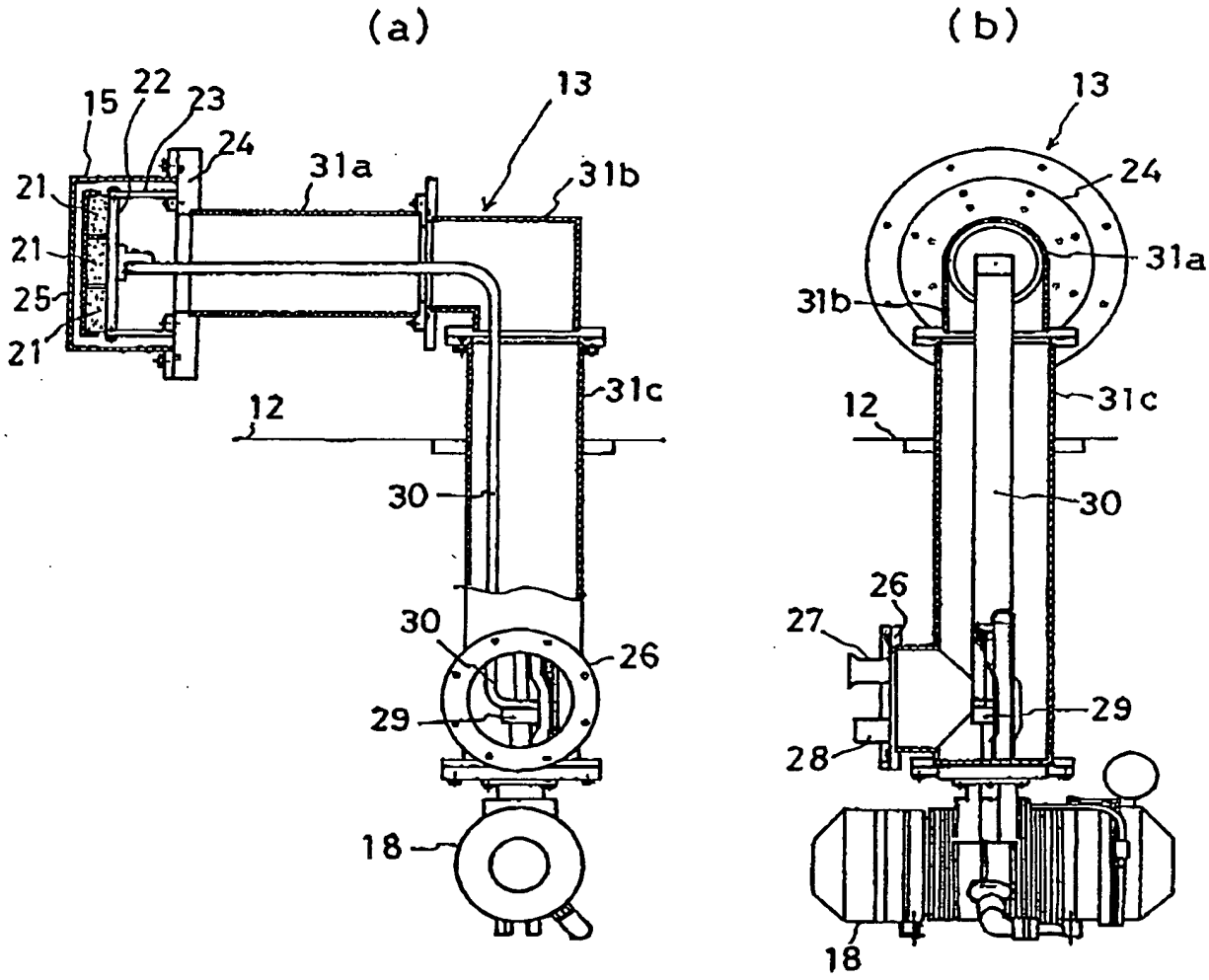


Fig.3

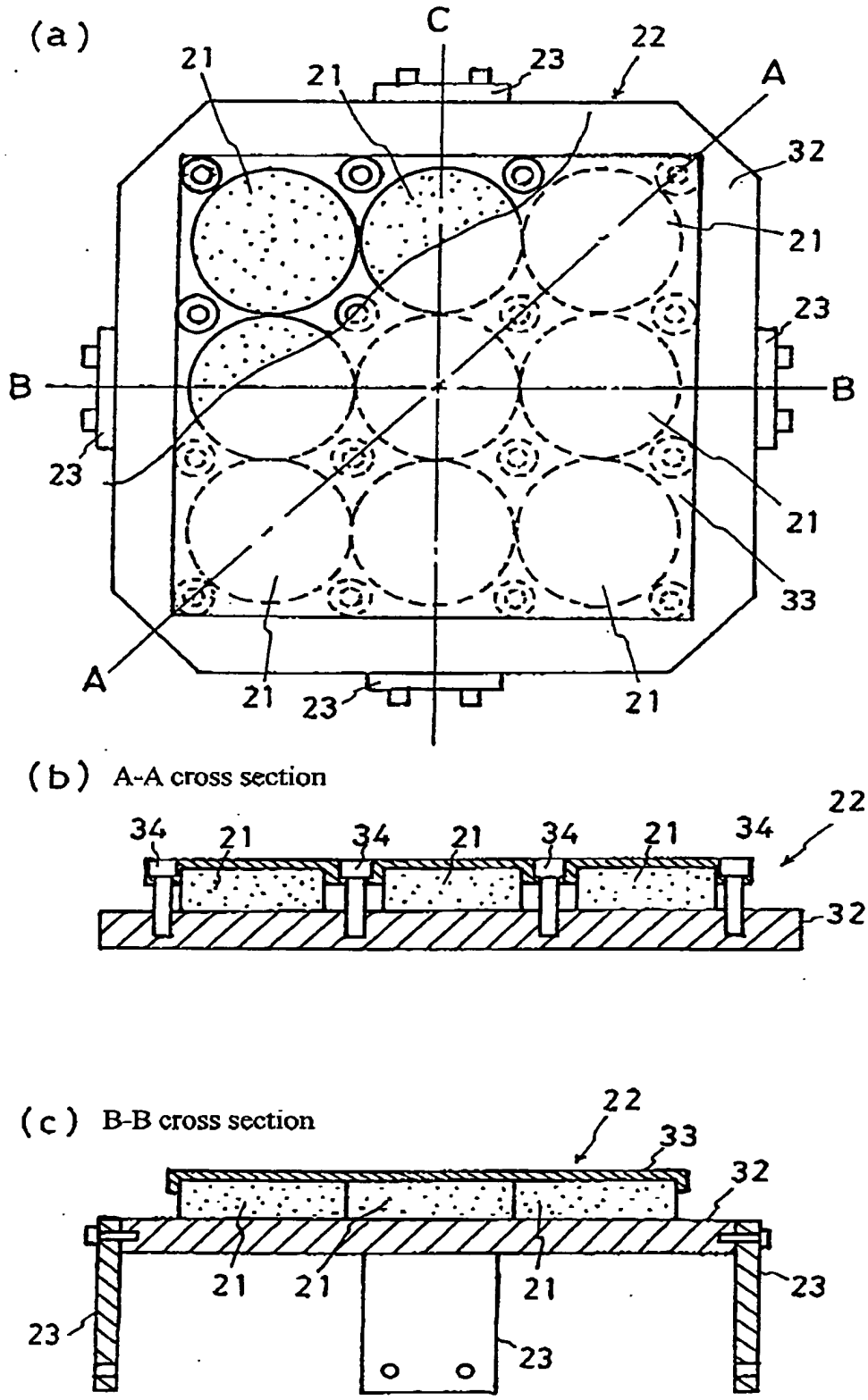
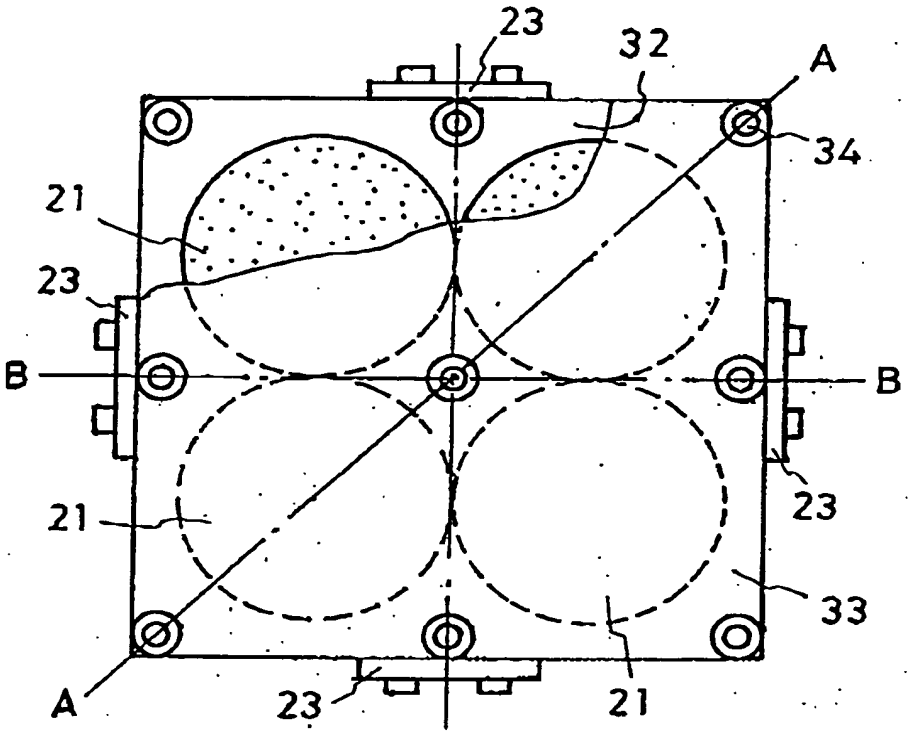
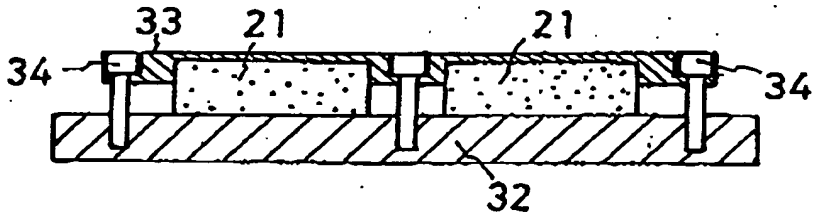


Fig. 4

(a)



(b) A-A cross section



(c) B-B cross section

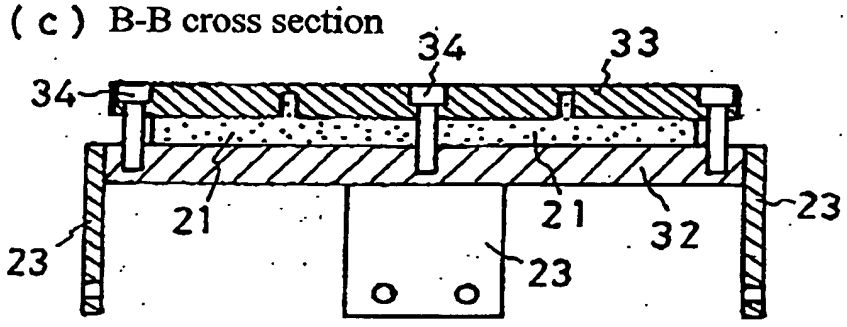
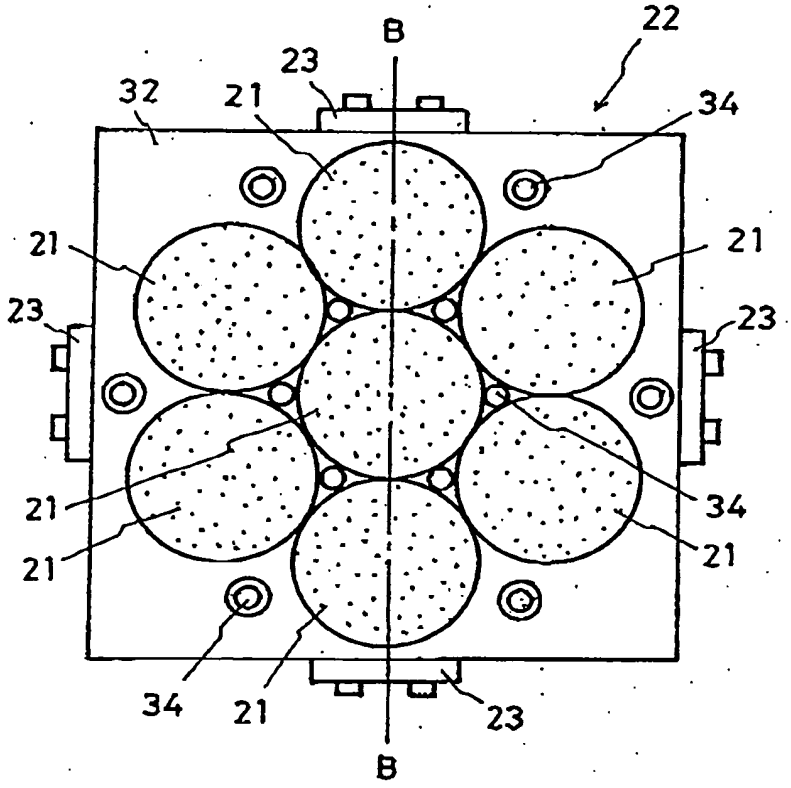


Fig. 5


B
22
23
32
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34
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23
23
21
34
21
21
34
21
23
B

Fig. 6

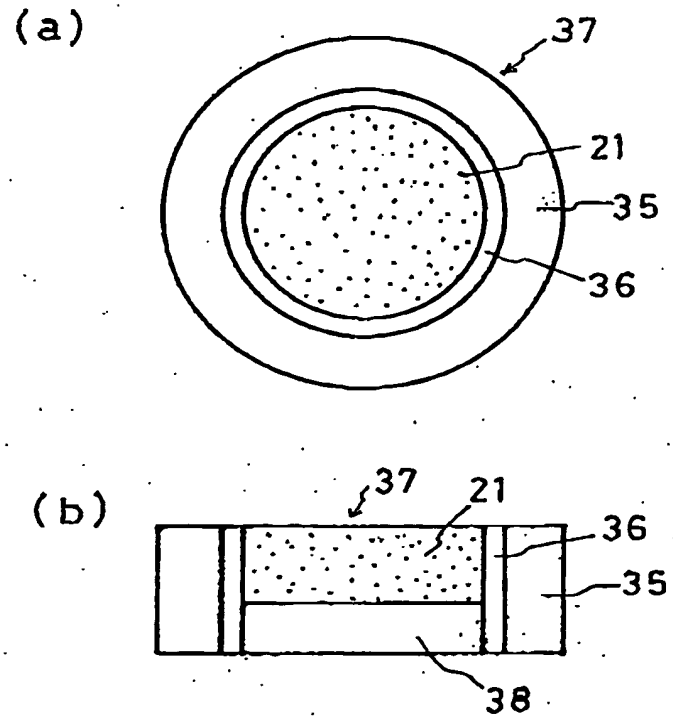
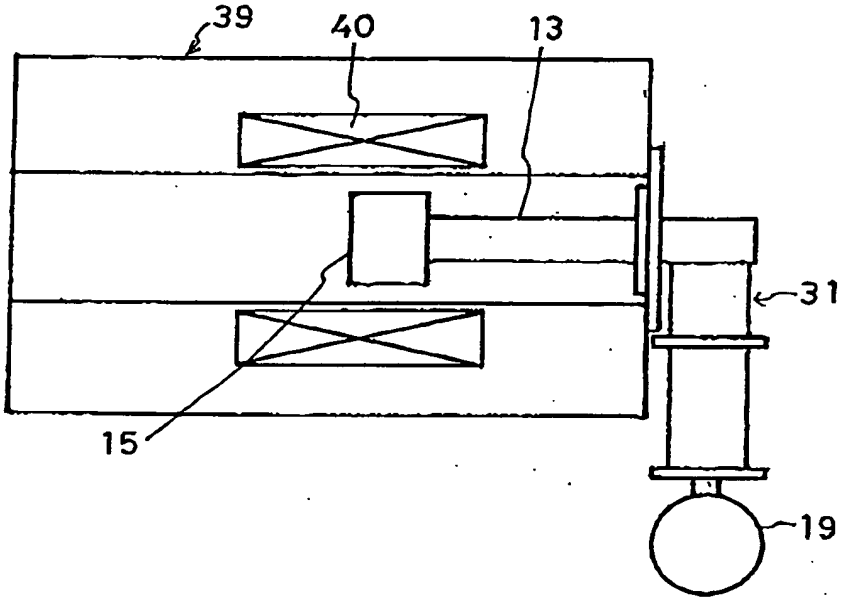

(a)
37
21
35
36
(b)
37
21
36
35
38

Fig. 7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40
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31
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Fig. 8

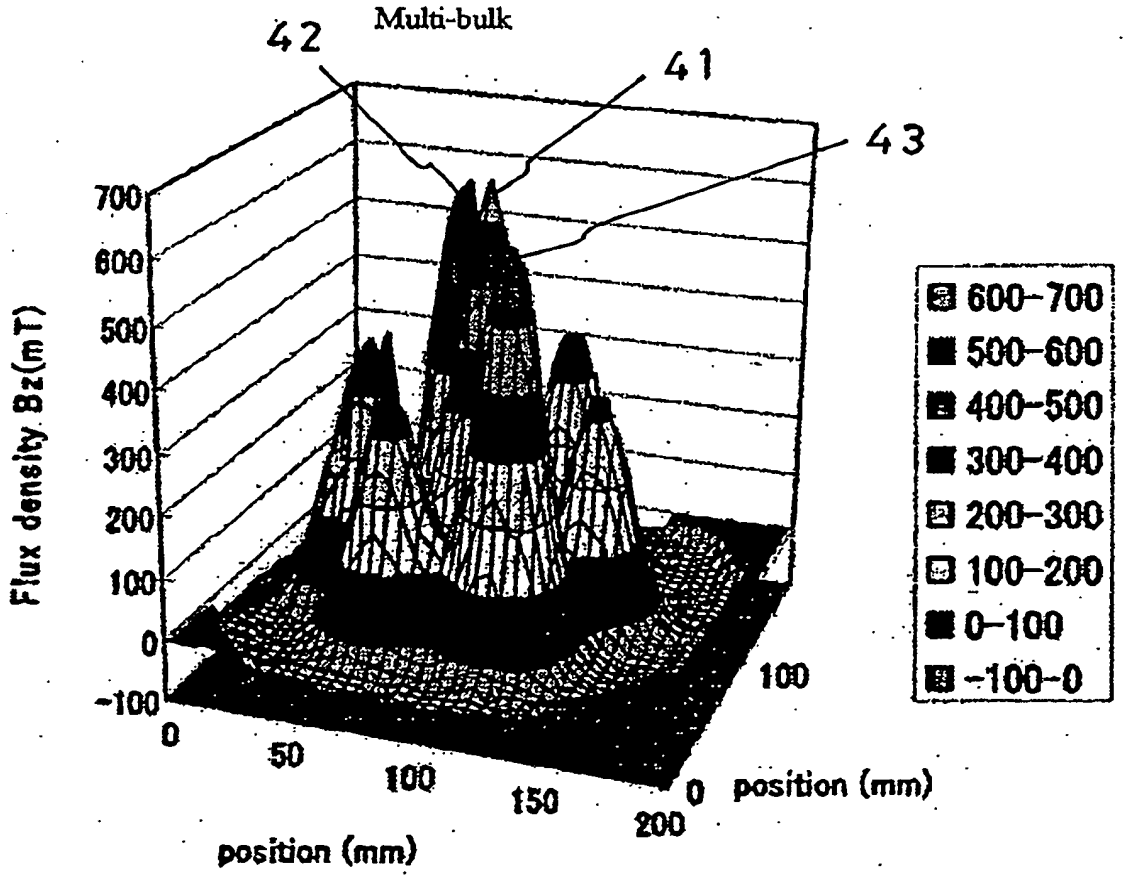

Multi-bulk
42
41
43
Flux density Bz(mT)
700
600
500
400
300
200
100
0
-100
0
50
100
150
200
position (mm)
0
100
position (mm)
600-700
500-600
400-500
300-400
200-300
100-200
0-100
-100-0

Fig. 9

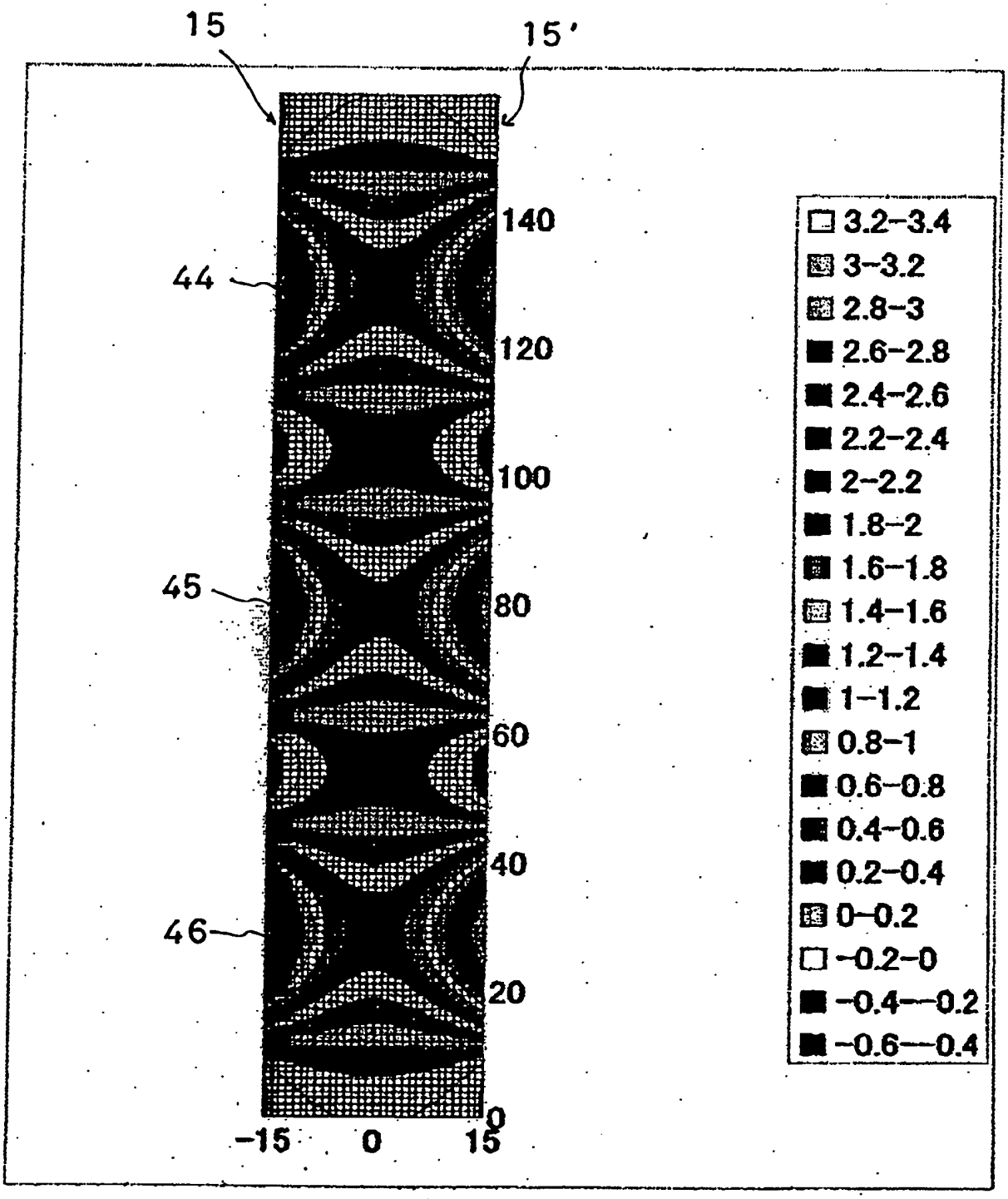
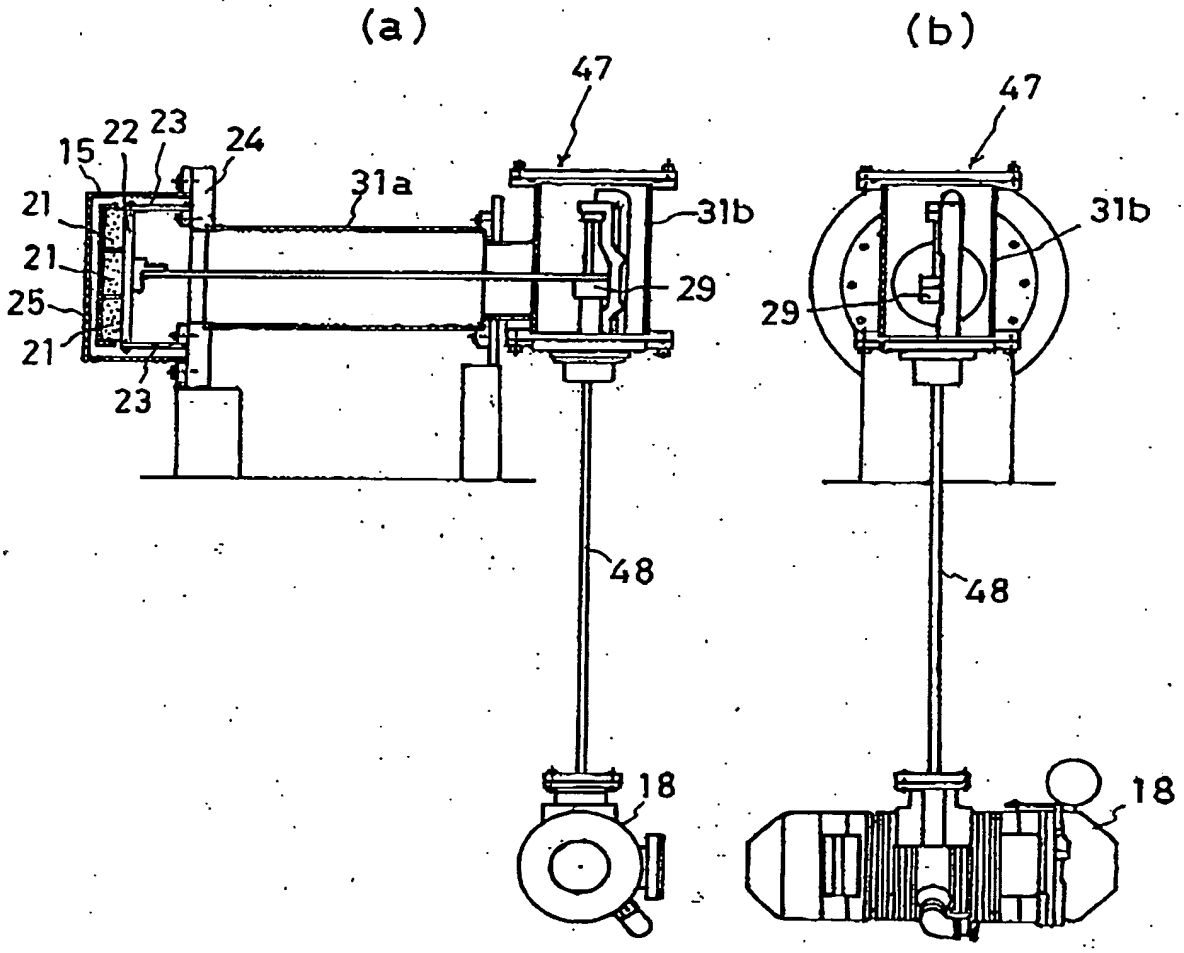

15
15'
44
45
46
140
120
100
80
60
40
20
0
-15
0
15
3.2-3.4
3-3.2
2.8-3
2.6-2.8
2.4-2.6
2.2-2.4
2-2.2
1.8-2
1.6-1.8
1.4-1.6
1.2-1.4
1-1.2
0.8-1
0.6-0.8
0.4-0.6
0.2-0.4
0-0.2
-0.2-0
-0.4--0.2
-0.6--0.4

Fig. 10


(a)
(b)
47
47
15
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31a
31b
31b
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Fig. 11

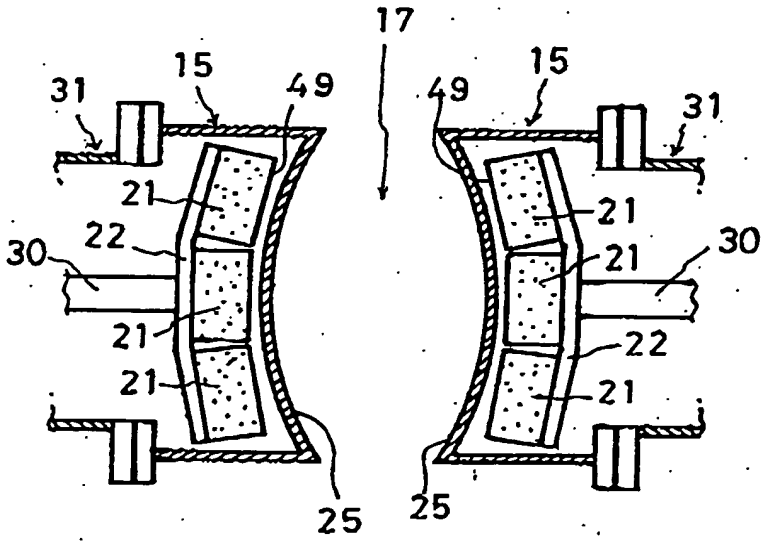
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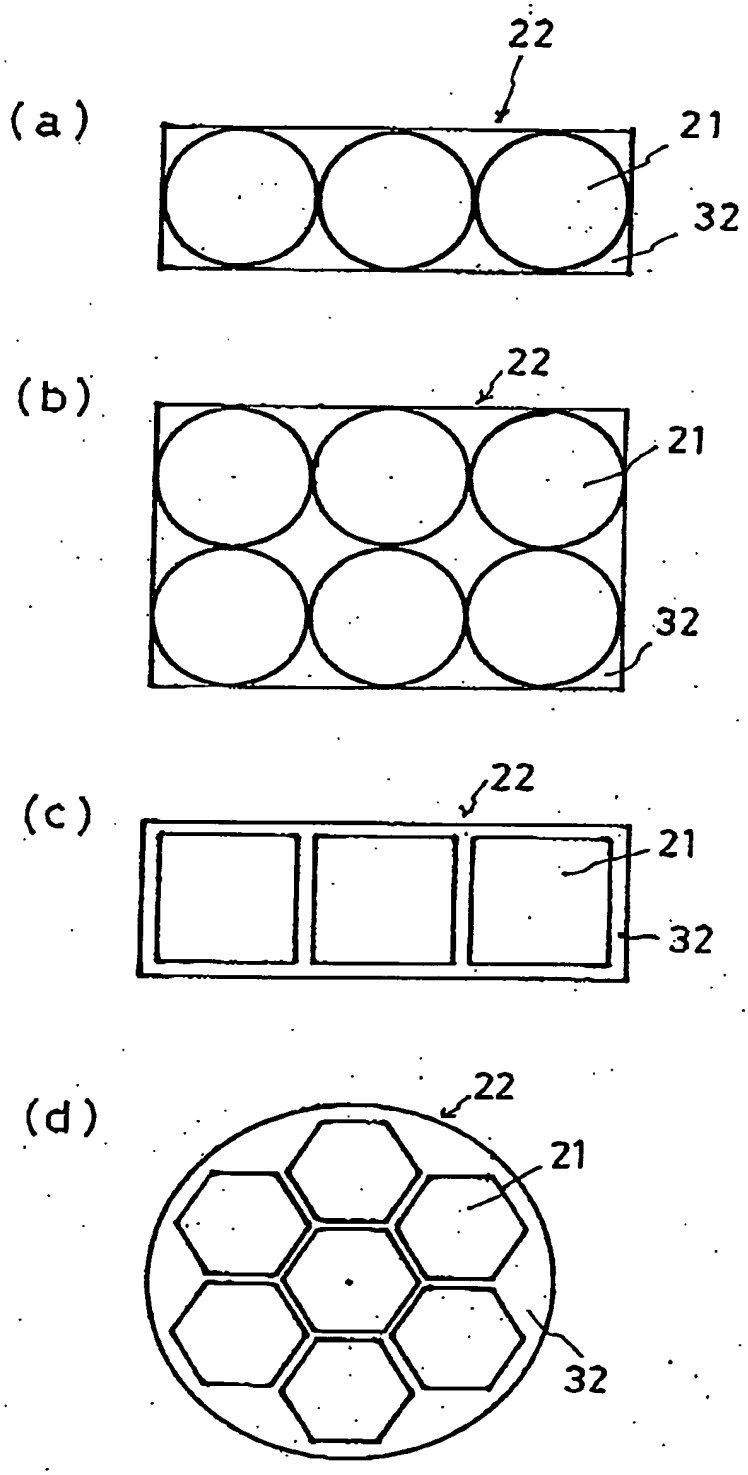
Fig. 12



EXPLANATION OF REFERENCES

11 superconducting permanent magnet apparatus
12 stand
13 magnetic pole assembly
15 vacuum vessel
17 usable space (of magnetic field)
18 ST pulse tube freezer, ST pulse freezer
19 ST pulse freezer
20 rail-and-carrier
20a handle
21 bulk superconductor
22 composite bulk
23 resin-based structural member
24 flange
25 vacuum vessel surface
26 vacuum flange
27 vacuum port
28 sensor electrode
29 cooling part
30 heat conveying member
31 vacuum tube
31a, 31b, 31c vacuum tube
32 magnet stand
33 holder plate
34 screw
35 stainless steel ring
36 low-temperature resin-based filling adhesive
37 bulk superconductor magnet
38 stainless steel plate
39 superconducting magnet
40 superconductor coil
41, 42, 43 peak (of magnetic field)
44, 45, 46 maximal peak (of magnetic field)
47 magnetic pole assembly
48 thin pipe
49 magnetic pole plane
50 connector part